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*Meat Canning in the Home

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MEAT CANNING

The home table provides a good market for livestock, and canning assures a year-around supply of meat, reduces waste at time of butchering, and yields a variety of meats as well as a convenient supply in emergencies.

SELECTION OF MEAT FOR CANNING

Select only healthy animals for canning. Winter is the best time for meat canning. The carcass can be thoroly chilled overnight, so that the meat will be ready for canning by the next morning. Butcher only the amount of meat that can be taken care of promptly. Freezing and thawing of meat breaks down the tissues and favors the growth of harmful bacteria that may result in spoilage. Meat that is butchered in warm weather should be precooked within 15 or 20 minutes from the time the animal is dressed, and the processing should be completed within 5 hours from the time the animal was slaughtered.

Meat canned from an unchilled carcass is not as tender as meat from a chilled carcass. Only fresh edible meat should be canned. The least odor or indication of spoilage should condemn a piece of meat for canning. All utensils should be sterilized before canning and every 40 minutes during the canning process.

PREPARATION OF MEAT

Remove bones and excess fat. Leave only enough fat to give a good flavor. Cut meat into pieces one-third larger than desired for serving, as the meat will shrink in precooking from 25 to 30 per cent. Cut roasts into two or more pieces to allow better heat penetration.

Tender Cuts

To roast.—Sear entire cut at high temperature; reduce heat, and roast until half done and until the red color has disappeared; salt, cut into desired pieces, pack into cans, add pan liquor, and exhaust.

Less Tender Cuts

To braise.—Heat; moisture and slow cooking help to make tough meat tender. Sear the meat in fat until brown, reduce temperature, add small amount of water or tomato juice, cover tightly and cook until tender or until red color is gone. If fibres are tough, the meat may first be scored with a knife, checker fashion. Pack into jars, add pan gravy and salt, and exhaust.

Deep fat frying.—Heat fat to 350 degrees F. or until it will brown a cube of dry bread in one minute, cut meat into single servings, fry in deep fat 2 minutes. Test fat to keep temperature to 350 degrees; do not allow fat to become smoking hot. This is a good method to use when there is a quantity of meat to can, as it saves time, retains the juices of the meat and develops a good flavor. Pack into jars, add small amount of meat broth, pack, and exhaust.

To stew.—Place meat in boiling water to cover, or chicken in a small amount of water, lower the heat and simmer 20 to 30 minutes at 196 degrees F. (simmering temperature). Do not let the water come to a boil again. Pack into jars, cover with boiling liquor, add salt to can and exhaust.

To steam meat in tin can.—Cut two or more pieces to fit can, fill can, and steam until no red color is visible—15 to 20 minutes in a pressure cooker, 40 to 60 minutes in a water bath. Allow steam to escape, remove cans, and add hot meat or juice from other cans to fill the can. Add salt, exhaust.

Hamburger.—Grind meat, season, form into little cakes, and fry or brown in oven. Pack into jars, exhaust.

Poultry.—Prepare the birds as for cooking. Clean thoroly, taking care not to break the gall bladder, which would make the meat unfit to use. The lungs, kidneys, eggs, and liver should not be used for canning, but the gizzard and heart may be, if desired. Trim off any large pieces of fat, so that it may not interfere with the penetration of heat. Cut the white meat in large pieces from the breast bone and shoulders, but leave the meat on the bones in other pieces. Cut the neck off close to the body. Use the very bony pieces, such as back, neck, and perhaps the feet, after they have been skinned, for making broth to fill up the containers. Make the broth by covering the bony pieces with lightly salted cold water and simmering until the meat becomes tender. Pack the chicken without cramming, using some pieces with bone in the center of the container. Leave space for liquid to circulate around the meat.

Soup stock.—Bone, gristle, or other trimmings from meat or poultry may be boiled and the liquor strained and canned for soup stock. Fill jars, process 60 minutes at 240 degrees or 10 pounds pressure.

PACKING OF MEAT

Wash, test, and sterilize the containers before the meat is precooked. Pack the meat into the cans, add salt, $\frac{3}{4}$ teaspoon to a pint jar, and the broth or pot liquor to within $\frac{3}{8}$ inches of top of can. Packing meat too tightly will retard heat penetration and may cause spoilage.

EXHAUSTING THE CANS

Exhaust cans in a steam or water bath for 15 to 20 minutes or until the temperature of the contents of the can is up to at least 170 degrees, add additional boiling liquor if needed, seal and process. In glass jars, packed hot, partially sealed and placed in the pressure cooker, the air will be withdrawn during the exhausting of the pressure cooker if petcock is left open for 7 to 10 minutes. These jars should be sealed immediately after processing. There is likely to be greater loss of liquid when can is partially sealed.

USE OF PRESSURE COOKER

A pressure cooker is a wise investment for canning. It permits the high temperature necessary to kill bacteria and spores, which if present will cause spoilage. If used for every-day cooking as well as canning, it will soon pay for itself in the saving of time and fuel. Complete directions for using steam pressure cookers are given in Farmers' Bulletin No. 1471, "Canning Fruits and Vegetables at Home." Secure a copy through the U.S. Government Printing Office, Washington, D.C., 5 cents a copy.

All meat should be canned in pressure cooker. It is only by cooking under pressure that a temperature higher than 212 degrees F. can be secured. Even in the oven at a temperature of 500 degrees F. the temperature within the can only reaches 212 degrees F. The high temperature of 250 degrees F. is necessary to destroy bacteria and spores which if present will cause spoilage. If the water bath is used, process cans at least 4 to 5 hours and on opening, cook at boiling temperature (212 degrees F.) for 15 minutes before tasting the meat. Do not use the oven or steamer as there is no simple way of gauging the time the cans are at 212 degrees F.

Details of Processing

In using a pressure cooker, be sure to leave the petcock open for 7 minutes or until there is a steady stream of steam, then close it. Begin to count time when the thermometer or dial indicates the desired temperature and pressure. Keep pressure uniform throughout the processing period—a change in pressure will draw out the liquor from the jar.

Table for Pressure Cooker

The time periods given apply to meat which is steaming hot, or about 170 degrees F. when packed or sealed. Allow 10 minutes longer for quart glass jars than for pint glass jars.

Process at 15 lb. Pressure or 250° F.				
	No. 2 can	Pint glass	No. 3 can	Quart glass
Beef, veal, and mutton	60 minutes	70 minutes	70 minutes	80 minutes
Pork	60 minutes	75 minutes	75 minutes	85 minutes
Chicken	50 minutes	60 minutes	60 minutes	70 minutes

Process at 10 lb. Pressure or 240° F.				
Chicken	70 minutes	90 minutes	90 minutes	100 minutes

Cooling

After processing glass jars or No. 3 tin cans, allow the pressure gauge to reach zero before opening the petcock, then open it gradually so there is no sudden outrush of steam. Complete the seal on glass jars and place them in the open air, protected from drafts, until cooled.

When No. 2 or No. 2½ cans are used, open the petcock on the pressure cooker gradually at the end of the processing period and allow the steam to escape. Place tin cans of all sizes in running water to cool.

BEST WAY TO STORE

If no signs of spoilage develop after holding 10 days at room temperature, store in a cool dry place.

PREPARATION FOR TABLE USE

All canned meat should be heated to the boiling point and held there for 15 minutes before serving. This precaution is to protect the user from danger of food poisoning. Meat which is insufficiently processed may keep if held at low temperature, but the chances are that the percentage of spoilage will be greater. Even when there are no visible signs of spoilage, certain bacteria may be present which would cause food poisoning. This short cooking will not kill the bacteria, but will destroy the toxin. If some of this food is left over and kept until another time, reheat it, for more toxin may have developed.